



## THE UNITED STATES PATENT AND TRADEMARK OFFICE

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Examiner :  
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Inventors : Kiyozo Asada

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PATENT TRADEMARK OFFICE

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Title : METHOD FOR GENE  
: TRANSFER INTO TARGET  
: CELLS WITH RETROVIRUS

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SUPPLEMENTAL PRELIMINARY AMENDMENT

Commissioner for Patents  
Washington, DC 20231

Sir:

In the above-referenced application, please add the following abstract:

In the Abstract

## -- ABSTRACT OF THE DISCLOSURE

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The present invention provides a method for increasing the efficiency of gene transfer into target cells with a retrovirus. The transduction is effected by infecting target cells with a retrovirus in the presence of a mixture of a functional material having a retrovirus binding domain, and a second functional material having target cell binding domain. The target cells may be selected from the group of unipotential hematopoietic progenitor cells and erythrocyte precursor, specifically pluripotent stem cells or embryopalstic stem cells. --